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Details:

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WISCONSIN STATE LEGISLATURE ... PUBLIC HEARING - COMMITTEE RECORDS

2005-06

(session year)

Assembly

(Assembly, Senate or Joint)

Committee on ... Agriculture (AC-Ag)

COMMITTEE NOTICES ...

- Committee Reports ... CR
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(ab = Assembly Bill) (sb = Senate Bill) (ar = Assembly Resolution)

(sr = Senate Resolution)

(ajr = Assembly Joint Resolution) (sjr = Senate Joint Resolution)

Miscellaneous ... Misc

1	ATCP 33.22 Dry fertilizer or pesticide storage structures. (1) GENERAL. Structures
2	used to store dry bulk fertilizer or dry bulk pesticide shall be designed, constructed, inspected
3	and maintained to withstand the pressure of stored product, to prevent discharges, and to prevent
4	precipitation from contacting stored product.
5	(2) INDOOR STORAGE REQUIRED. An operator shall store dry bulk fertilizer and dry bulk
6	pesticide on a portland cement concrete surface in a fully enclosed building, except that the
7	operator may store the following products outdoors:
8	(a) Products that are fully enclosed in durable sealed weatherproof packages or
9	containers.
10	(b) Potassium chloride, or another fertilizer product specifically authorized in writing by
11	the department, if all of the following apply:
12	1. The product is stored on an asphalt concrete or portland cement concrete surface that
13	will contain any precipitation runoff that may come in contact with the stored product.
14	2. The product is fully covered by a waterproof cover that prevents exposure to
15	precipitation.
16	(3) REMOVING PRODUCT FROM STORAGE STRUCTURE. An operator shall remove all bulk
17	fertilizer and bulk pesticide from a dry bulk fertilizer or dry bulk pesticide storage structure if
18	any of the following apply:
19	(a) The structure is no longer used to store dry bulk fertilizer or dry bulk pesticide.
20	(b) The operator transfers ownership of the structure to a person who is not an operator.
21	(c) The department orders the removal or demolition of the storage structure, as part of a

(d) The operator fails to maintain the structure according to sub. (1).

discharge cleanup under ch. ATCP 35.

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1	(4) SECURITY. Structures used to store dry bulk fertilizer or dry bulk pesticide shall be
2	secured against access by unauthorized persons when the operator is not present at the storage
3	facility.
4	(5) LABELING STORAGE BINS AND CONTAINERS. (a) An operator shall label every storage
5	bin and container used to store dry bulk fertilizer or dry bulk pesticide.
6	(b) A fertilizer label under par. (a) shall include the name or grade of the fertilizer, as
7	required by s. 94.64(2)(d), Stats.
8	(c) A pesticide label under par. (a) shall comply with the federal insecticide, fungicide
9	and rodenticide act as amended (7 USC 136 et seq.) and regulations issued under that act. The
10	label shall include the identification number of the pesticide producing establishment from which
11	the pesticide originated.
12 13 14 15	SUBCHAPTER IV MIXING AND LOADING PADS
16	ATCP 33.30 Mixing and loading pads required. (1) Except as provided in s. ATCP
17	33.32(8) or (9) or s. ATCP 33.34(6), all handling of bulk fertilizer or bulk pesticide at a storage
18	facility shall be conducted over a mixing and loading pad.
19	(2) A mixing and loading pad shall be constructed and maintained to catch, contain and
20	allow recovery of reasonably foreseeable discharges that may result from the handling of the
21	bulk fertilizer or pesticide.
22	ATCP 33.32 Mixing and loading pad for liquid products. Except as provided in sub.
23	(8) or (9), a mixing and loading pad used for liquid fertilizer or pesticide shall comply with all of

- 1 (1) PUMP CONTAINMENT. A mixing and loading pad shall extend beneath any pump that
 2 the operator uses to transfer liquid fertilizer or pesticide, unless the pump is located within a
 3 secondary containment structure that complies with s. ATCP 33.42.
 - (2) APPURTENANCE CONTAINMENT. A mixing and loading pad shall extend beneath any appurtenance or plumbing connection through which the operator transfers liquid fertilizer or pesticide, unless one of the following applies:
 - (a) The appurtenance or connection is located within a secondary containment structure that complies with s. ATCP 33.42.
 - (b) The appurtenance or connection is threaded, welded or permanently band-clamped.
 - (3) DESIGN, CONSTRUCTION AND MAINTENANCE; GENERAL. A mixing and loading pad shall comply with all of the following requirements:
 - (a) It shall be liquid-tight.

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- (b) It shall have the capacity required in sub. (4).
- 14 (c) It shall be constructed of materials specified in sub. (5).
- 15 (d) It shall be served by a pump and storage container that comply with s. ATCP 33.50.
- (e) If it drains to a sump, the sump shall comply with s. ATCP 33.36.
 - (f) It shall be designed, constructed and maintained to withstand all foreseeable load conditions, including the filled weight of all vehicles, storage containers, appurtenances, pumps and equipment that may be used or located within it.
 - (g) It shall be protected against precipitation runoff from surrounding surfaces.
 - (h) It may not have any precipitation drain through which spilled fertilizer or pesticide could be discharged. Any precipitation drain that exists on *[revisor inserts effective date of this rule]* shall be permanently sealed within 6 months after that date.

- (i) It shall be inspected and maintained as provided in subs. (6) and (7).
- (4) CAPACITY. The capacity of a mixing and loading pad under this section, including the capacity of any sump to which the mixing and loading pad drains, shall be at least 1,000 gallons or 125 percent of the capacity of the largest storage container loaded or unloaded at the storage facility, whichever is less. This subsection does not apply to a mixing and loading pad that was in use prior to *[revisor inserts effective date of this rule]* and complies with capacity requirements that were in effect at that time, unless the operator substantially alters the mixing and loading pad.
- 2 (5) CONSTRUCTION MATERIALS. (a) Except as provided in par. (b), a mixing and loading pad shall be constructed of portland cement concrete. A portland cement concrete mixing and loading pad constructed on or after *[revisor inserts effective date of this rule]* shall meet the standards specified in chapters 5 and 6 of the *Wisconsin minimum design standards for concrete agrichemical containment (February, 2005)*.

NOTE: The Wisconsin minimum design standards for concrete agrichemical
containment (February, 2005) were written by Professor David W. Kammel of
the department of biological systems engineering, university of Wisconsinextension. Copies are on file with the department and the revisor of statutes.
Copies are available from the department, at no charge, at the following address:

Department of Agriculture, Trade and Consumer Protection
Agricultural Resource Management Division

15 P.O. Box 8911

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Madison, WI 53708-8911

Phone: (608) 224-4500

Web: http://www.datcp.state.wi.us

20 (b) A mixing and loading pad that was in use prior to *[revisor inserts effective date of this rule]* may be constructed of asphalt concrete, provided that it is not used after December 31, 22 2009.

(6) CONSTRUCTION INSPECTION. If a concrete mixing and loading pad is constructed on or after *[revisor inserts effective date of this rule]*, the operator or a person chosen by the operator shall inspect the construction for conformity to the design specifications filed with the department under s. ATCP 33.10(1). The person conducting the inspection shall inspect and approve the construction of the soil sub-base, the laying of structural steel, and the laying of waterstop materials and devices before concrete is poured. The operator shall provide a copy of the inspection report and approval to the department.

- **NOTE:** The department recommends that construction inspection be performed by a qualified person experienced in reading plans and inspecting construction.
 - (7) INSPECTION AND MAINTENANCE. (a) An operator shall inspect a mixing and loading pad at least semi-annually, and shall maintain the mixing and loading pad as necessary, to ensure compliance with this section.
 - (b) Whenever an operator repairs a mixing and loading pad, the operator shall make the repair according to good engineering practice and manufacturer specifications, using materials approved by the department.
 - (c) An operator shall remove a mixing and loading pad if the operator cannot maintain it in compliance with this section, or if corrective action is needed to remove contamination from beneath the pad. An operator shall remove a leaking mixing and loading pad unless the pad is repaired and remains liquid-tight for at least 2 years after the date of repair.
 - (8) PUMPING LIQUID PRODUCTS FROM RAIL CARS. Section ATCP 33.30 and subs. (1) through (7) do not apply to the pumping of liquid bulk fertilizer or liquid bulk pesticide from a rail car to a storage container, provided that all of the following apply:
 - (a) The hose or pipeline from the rail car outlet valve to the pump is equipped with a shut-off valve, unless the pump can draw from no other hose or pipeline.

- 1 (b) The hose or pipeline from the pump to the storage container is equipped with an 2 automatic check valve to prevent back flow. The check valve shall be located as close to the pump effluent port as possible, consistent with good engineering practice.
 - (c) All of the following are located over one or more spill containment basins that comply with par. (d):
- 1. The rail car outlet valve. 6
- 7 2. The pump.

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- 8 3. Every valve or plumbing connection that is located between the rail car outlet valve 9 and the storage container, unless the valve or plumbing connection is threaded, welded, fused or permanently band-clamped. 10
 - (d) Every containment basin under par. (c) is liquid-tight, and is constructed of durable rigid material that is chemically compatible with any liquid that may be discharged to it. The basin shall have a capacity of at least 75 gallons, or a capacity at least equal to the capacity of the appurtenances that may discharge to it, whichever is greater. A containment basin may be permanent or portable. The operator shall routinely inspect and maintain the basin to ensure compliance with this paragraph.
 - (e) If the operator pumps the fertilizer or pesticide from the rail car to another mobile container, the other mobile container is parked on a mixing and loading pad that complies with this section.
- 20 (9) LOADING LIQUID BULK PESTICIDE INTO ANHYDROUS AMMONIA NURSE TANK. Section ATCP 33.30 and subs. (1) through (7) do not apply to the loading of liquid bulk pesticide into an 21 22 anhydrous ammonia nurse tank if all of the following apply:

- 1 (a) The operator loads the bulk pesticide from a storage container that is located over a 2 mixing and loading pad that complies with this section, or over a secondary containment
- 3 structure that complies with s. ATCP 33.42.
- 4 (b) The operator uses a positive displacement pump to transfer the pesticide to the
- 5 anhydrous ammonia nurse tank. The pump shall be located over a mixing and loading pad that
- 6 complies with this section, or over a secondary containment structure that complies with s.
- 7 ATCP 33.42. The pump shall be rated to deliver no more than 3 gallons per minute at a pressure
- 8 of no more than 250 psi. The pump shall be equipped for manual shutdown, in addition to
- 9 automatic shutdown under par. (c)2.

- 10 (c) The pump under par. (b) is equipped with electronic controls that do all of the following:
- 1. Prevent pump operation until the operator manually pre-sets the pumping volume and engages a separate manual starter switch.
 - 2. Automatically stop the pump when the pre-set volume has been pumped.
- 15 (d) The hose from the pump to the anhydrous ammonia nurse tank meets all of the following requirements:
- 1. It is no longer than 12 feet and has an inside diameter of not more than 1/2 inch.
- 18 2. It has a rated operating pressure of at least 1,200 psi with a burst strength of at least
 19 5,000 psi.
- 3. It has a check valve near its nurse tank end, and a manually operated valve and coupling to connect it to the nurse tank.
- 22 (e) The operator tests the connection between the hose and nurse tank before loading 23 pesticide into the nurse tank, to ensure that the connection does not leak.

1 2 3	<i>NOTE:</i> The most common pesticide products loaded into anhydrous ammonia are nitrapyrin based products.
4	ATCP 33.34 Mixing and loading pad for dry products. Except as provided in sub.
5	(6), a mixing and loading pad used for dry fertilizer or pesticide shall comply with all of the
6	following:
7	(1) CONVEYOR CONTAINMENT. A mixing and loading pad shall extend beneath any
8	conveyor used to load or unload dry bulk fertilizer or dry bulk pesticide, unless the conveyor is
9	fully enclosed within a housing that contains all spillage from the conveyor.
10 11 12	NOTE: Section ATCP 33.62 requires that the unloading chute or conveyor be equipped with a dust control system or device to further minimize the risk of discharge.
13	(2) PORTLAND CEMENT OR ASPHALT CONCRETE CONSTRUCTION. A mixing and loading
14	pad shall be constructed of portland cement or asphalt concrete.
15	(3) STRUCTURAL CAPABILITY. A mixing and loading pad shall be designed, constructed
16	and maintained to withstand all foreseeable load conditions, including the filled weight of all
17	vehicles, application equipment or and other equipment that may be used or located on it.
18	(4) MIXING AND LOADING PAD INSPECTION AND MAINTENANCE. An operator shall inspect
19	a mixing and loading pad at least semi-annually, and shall maintain the mixing and loading pad
20	as necessary, to ensure compliance with this section. Whenever an operator repairs a mixing and
21	loading pad, the operator shall make the repair according to good engineering practice and
22	manufacturer specifications.
23	(5) MIXING AND LOADING PAD REMOVAL. An operator shall remove a mixing and
24	loading pad if the operator cannot maintain it in compliance with this section, or if corrective
25	action is needed to remove contamination from beneath the pad.

ı	(0) UNLOADING DRY FERTILIZER FROM RAIL CARS. Section ATCP 33.30 and subs. (1)
2	through (5) do not apply to the unloading of dry bulk fertilizer from bottom-unloading rail cars,
3	provided that the operator unloads the fertilizer over one of the following:
4	(a) A fixed or portable containment basin or a portland cement or asphalt concrete pad.
5	The containment basin shall be made of durable rigid material, and shall effectively contain any
6	dry fertilizer that may be discharged during the unloading process. The operator shall routinely
7	inspect and maintain the containment basin or pad to ensure compliance with this paragraph.
8	(b) A well-maintained tarpaulin, if the fertilizer is unloaded prior to December 31, 2009
9	and the facility utilized a well-maintained tarpaulin for dry fertilizer or pesticide unloading from
10	railcars prior to [revisor inserts effective date of this rule].
11 12 13	SUBCHAPTER V SUMPS
14	ATCP 33.36 Sumps; general. If a mixing and loading pad or secondary containment
15	structure drains to a sump, the sump shall be all of the following:
16	(1) Designed, constructed and maintained to contain liquid that drains to the sump.
17	(2) Liquid-tight.
18	(3) Constructed according to s. ATCP 33.38.
19	(4) Served by a pump and storage container that comply with s. ATCP 33.50.
20	(5) Inspected and approved at the time of construction, in the same manner as a mixing
21	and loading pad inspected under s. ATCP 33.32(6), if the sump is constructed of portland cemen
22	concrete on or after [revisor inserts effective date of this rule]. The operator shall provide
23	DATCP with a copy of the inspection report and approval.
24	(6) Routinely inspected and maintained to ensure compliance with this section.

1	(7) Repaired, when necessary, according to good engineering practice and manufacturer
2	specifications.
3	(8) Removed if it cannot be maintained in compliance with this section, or if corrective
4	action is needed to remove contamination from beneath the sump. An operator shall remove a
5	leaking sump unless the sump is repaired and remains liquid-tight for at least 2 years after the
6	date of repair.
7	ATCP 33.38 Sump construction. (1) GENERAL. Except as provided in sub. (2):
8	(a) A sump that is part of a mixing and loading pad, or part of a portland cement concrete
9	secondary containment structure, shall be constructed of portland cement concrete and shall meet
10	the standards specified in chapters 5 and 6 of the Wisconsin minimum design standards for
11	concrete agrichemical containment (February, 2005).
12 13 14 15 16 17 18 19 20 21 22 23 24 25	 NOTE: The Wisconsin minimum design standards for concrete agrichemical containment (February, 2005), written by Professor David W. Kammel, department of biological systems engineering, university of Wisconsin-extension, is on file with the department and the revisor of statutes. Copies are available from the department, free of charge, at the following address: Department of Agriculture, Trade and Consumer Protection Agricultural Resource Management Division P.O. Box 8911 Madison, WI 53708-8911 Phone: (608) 224-4500 Web: http://www.datcp.state.wi.us (b) A sump shall have a capacity of not more 50 gallons.
26	(c) A sump may not be more than 2 feet deep, or have a depth that exceeds its shortest
27	width.
28	(d) The walls and floors of a sump shall be at least as thick, at every point, as the mixing
29	and loading pad or secondary containment structure floor that drains to the sump.

- (e) A sump that is part of a mixing or loading pad shall form part of a continuous 1 2 surface, having an area of at least 15 feet by 15 feet and a capacity of at least 250 gallons, which 3 is free of construction and control joints.
 - (f) If a sump is constructed as part of a concrete mixing and loading pad or concrete secondary containment structure, it shall be constructed in a continuous concrete pour with that pad or structure.

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- 7 (g) No pipes or openings may extend through a sump. This does not prohibit a surface 8 trough or rim indentation needed to accommodate a pipe or hose connection required under s. 9 ATCP 33.50.
- 10 (h) A sump shall be readily accessible for inspection. Pumps, collection basins or other equipment placed in the sump shall be readily removable, so that all surfaces of the sump can be 12 easily inspected.
 - (2) EXEMPTION. Subsection (1) does not apply to a sump that was in service prior to [revisor inserts effective date of this rule] if all of the following apply:
- 15 (a) The sump is not substantially altered on or after *[revisor inserts effective date of this]* 16 rule].
 - (b) The sump does not receive runoff from any mixing and loading pad or secondary containment structure that is constructed or substantially altered on or after *[revisor inserts*] effective date of this rule].
 - (c) The sump meets construction standards that applied at the time of its construction.
 - (d) The operator pressure tests any underground piping or conduit connected to the sump to ensure that the piping or conduit is liquid-tight. The operator shall perform a pressure test at least annually and shall keep a written record of the pressure test results.

2 3	SUBCHAPTER VI SECONDARY CONTAINMENT STRUCTURES
4 5	ATCP 33.40 Secondary containment required. (1) GENERAL. Except as provided in
6	sub. (2), all of the following shall be located within a secondary containment structure that
7	complies with s. ATCP 33.42:
8	(a) Storage containers.
9	(b) Storage container shut-off valves under s. ATCP 33.20(2)(a).
10	(c) Liquid level gauging devices under s. ATCP 33.20(3).
11	(2) EXEMPT STORAGE CONTAINERS. No secondary containment is required under sub. (1)
12	for any of the following:
13	(a) An empty storage container that has been thoroughly cleaned and rinsed. A pesticide
14	container is thoroughly cleaned and rinsed if all exterior surfaces of the container are free of
15	pesticide residues and all inside surfaces are triple rinsed.
16	(b) A mobile container kept at a storage facility for fewer than 7 days if all of the
17	following apply:
18	1. Loading and unloading of the mobile container complies with s. ATCP 33.30 and
19	33.32.
20	2. The storage facility has at least one storage container that has unused capacity greater
21	than the total capacity of the mobile container.
22	(c) A mini-bulk container if the exterior surfaces of the mini-bulk container are clean and
23	one of the following applies:
24	1. The mini-bulk container is triple rinsed.

2. The mini-bulk container is equipped with a device to prevent the container from being 1 2 triple rinsed. (d) An abandoned storage container if the operator complies with s. ATCP 33.20(14). 3 ATCP 33.42 Secondary containment structures; standards. A secondary 4 containment structure required under s. ATCP 33.40(1) shall comply with all of the following 5 requirements: 6 (1) CONSTRUCTION STANDARDS; GENERAL. (a) A secondary containment structure shall 7 take one of the forms authorized in s. ATCP 33.44. 8 (b) A secondary containment structure shall be designed, constructed and maintained to 9 10 contain potential discharges of liquid fertilizer or pesticide from storage containers and appurtenances located within the structure. 11 (c) A secondary containment structure shall have the capacity required in sub. (2). An 12 13 operator shall notify the department at least 7 business days before installing an additional storage container in a secondary containment structure, or replacing an existing storage container 14 in a secondary containment structure with a larger storage container. 15 (d) A secondary containment structure shall comply with applicable wall height 16 requirements in sub. (3). 17 (e) A secondary containment structure shall be designed, constructed and maintained to 18 19 do all of the following: 1. Withstand the full hydrostatic head of any liquid discharged within the structure. 20

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2. Prevent liquid in the structure from moving to groundwater or other waters of the

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- 1 (f) A secondary containment structure shall have a coefficient of permeability of not 2 more than 1x10⁻⁶ cm/sec.
- (g) A secondary containment structure shall be designed to withstand the filled weight
 of all storage containers, appurtenances, pumps and equipment that may be used or located
 within it.
 - (h) A secondary containment structure may not have any opening through which precipitation or other liquids may drain from the structure. This paragraph does not apply to any of the following:
 - 1. A tank-in-tank that complies with s. ATCP 33.44(9).

- 2. A bladder tank that complies with s. ATCP 33.44(10).
- 3. An opening for a pipe that extends through the wall of a secondary containment structure constructed prior to *[revisor inserts]* the *effective date of this rule]*, provided that the operator complies with s. ATCP 33.20(2)(d)2. or the secondary containment structure has adequate containment capacity as required under sub. (2) below the level of the opening.
- (2) CAPACITY. (a) The capacity of a secondary containment structure, including all portions of the structure to which a liquid may freely flow, shall be at least equal to the sum of all the following:
- 1. One hundred and twenty five percent of the capacity of the largest storage container in the secondary containment structure if the secondary containment structure is not fully enclosed in a building, or 110% of the capacity of the largest storage container in the secondary containment structure if the secondary containment structure is enclosed in a building.

- 2. The total volume of discharged liquid that would be displaced by the submerged portions of all other storage containers, fixtures and materials located within the secondary containment structure, if the structure were filled to capacity with discharged liquid.
 - (b) Paragraph (a) does not apply to a bladder tank that complies with s. ATCP 33.44(10).
- 5 (3) WALL HEIGHT. (a) Except as provided in pars. (b) to (d), a secondary containment 6 structure shall have walls at least 4 inches high but not more than 4 feet high, measured from the 7 interior floor of the secondary containment structure.
 - (b) Paragraph (a) does not apply to an earthen-lined structure that complies with s. ATCP 33.44(6), a tank-in-tank that complies with s. ATCP 33.44(9), or a bladder tank that complies with s. ATCP 33.44(10).
 - (c) A secondary containment structure that was in use prior to *[revisor inserts effective date of this rule]* may have walls more than 4 feet high if the structure provides safe access to storage containers and appurtenances, and a safe exit in the event of a discharge.
 - (d) A secondary containment structure that was in use prior to *[revisor inserts effective date of this rule]* may have walls less than 4 inches high, provided that the structure meets the capacity requirements in sub. (2).
 - (4) STORAGE CONTAINER LOCATION. (a) Except as provided in par. (b), all storage containers in a secondary containment structure shall be located at least 24 inches from the walls of the structure and at least 24 inches from each other.
 - (b) Paragraph (a) does not apply to any of the following:
- Storage containers installed in a secondary containment structure constructed prior to
 [revisor inserts effective date of this rule].
 - Bladder tanks.

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1 3. Mini-bulk containers.

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- 2 (5) INSPECTION AND MAINTENANCE. An operator shall do all of the following:
- 3 (a) Routinely inspect and maintain a secondary containment structure to ensure compliance with this subchapter.
- 5 (b) Repair a secondary containment structure, when necessary, according to good engineering practice and manufacturer specifications.
 - (c) Remove a secondary containment structure if the operator cannot maintain it in compliance with this subchapter, or if corrective action is needed to remove contamination from beneath the structure. An operator shall remove a leaking secondary containment structure unless the structure is repaired and remains liquid-tight for at least 2 years after the date of repair.
 - (6) LIQUID PESTICIDE STORED WITH OTHER MATERIALS. (a) Except as provided in par. (b), only the following materials may be stored in the same secondary containment structure with liquid bulk pesticide:
- 1. Other liquid pesticides.
- 15 2. Pesticide diluting agents.
- 16 3. Pesticide rinsate.
- 4. Empty pesticide containers.
- 18 5. Recovered pesticide discharges.
- (b) Liquid bulk pesticide may be stored in the same secondary containment structure withbulk fertilizer or dry bulk pesticide if either of the following applies:
- The secondary containment structure contains only mini-bulk or mobile storage
 containers, or both.
 - 2. The secondary containment structure is located within a fully enclosed building.

1	ATCP 33.44 Secondary containment structures; forms of construction. A secondar
2	containment structure shall take one of the forms authorized in this section.
3	(1) CONCRETE STRUCTURES. (a) A secondary containment structure may be constructed
4	of concrete.
5	(b) A concrete secondary containment structure constructed on or after [revisor inserts
6	effective date of this rule] shall be constructed of portland cement concrete and shall comply
7	with standards specified in chapters 5 and 6 of the Wisconsin minimum design standards for
8	concrete agrichemical containment (February, 2005).
9 10 11 12 13 14 15 16 17 18 19 20 21	 NOTE: The Wisconsin minimum design standards for concrete agrichemical containment (February, 2005), written by professor David W. Kammel, department of biological systems engineering, university of Wisconsin-extension is on file with the department and the revisor of statutes. Copies are available from the department at the following address: Department of Agriculture, Trade and Consumer Protection Agricultural Resource Management Division P.O. Box 8911 Madison, WI 53708-8911 Phone: (608) 224-4500 Web: : http://www.datcp.state.wi.us
22	(c) If a concrete secondary containment structure is constructed on or after [revisor
23	inserts effective date of this rule], the operator or a person chosen by the operator shall inspect
24	the construction for conformity to the design specifications filed with the department under s.
25	ATCP 33.10(1). The person conducting the inspection shall inspect and approve the
26	construction of the soil sub-base, the laying of structural steel, and the laying of waterstop
27	materials and devices before concrete is poured. The operator shall provide a copy of the
28	inspection report and approval to the department.
29 30	NOTE: The department recommends that construction inspection be performed by a qualified person experienced in reading plans and inspection construction.

- (2) CONCRETE BLOCK STRUCTURES. A secondary containment structure may have walls constructed of prefabricated portland cement concrete blocks if all of the following apply:
- 3 (a) Spaces within the blocks are filled with portland cement concrete and the blocks are4 joined with mortar.
 - (b) The floor of the structure is made of poured portland cement concrete.

- (c) The structure was constructed prior to [revisor inserts effective date of this rule].
- (d) The structure is not used after [revisor inserts date that is one year after the effective date of this rule].
- (3) STRUCTURES WITH SYNTHETIC LINERS. A secondary containment structure may be constructed of earth or other materials if the structure is fully lined with a synthetic liner and all of the following apply:
- (a) The operator installs the liner and tests liner seams according to manufacturer specifications. A qualified representative of the liner manufacturer shall perform or supervise the installation and testing.
 - (b) The liner is at least 30 mils (0.8 millimeter) thick.
- (c) The manufacturer certifies in writing that the liner is chemically compatible with all fertilizers or pesticides that the operator may store within the secondary containment structure.

 The operator may not store, within the liner, any fertilizer, pesticide or chemical for which the liner is not certified.
- (d) The liner manufacturer guarantees liner effectiveness until a date specified by the manufacturer. The operator may not use the liner beyond that date unless the operator conducts an inspection of the liner within the first year after that date, and at least once every 5 years thereafter. Each inspection shall comply with all of the following requirements:

- 1. The operator shall remove all gravel and geotextile from those portions of the liner
- 2 that are not covered by storage containers, and shall inspect those portions of the liner.
- 2. The operator shall remove a storage container, and inspect those portions of the liner
- 4 that were covered by the storage container, if an inspection under subd. 1. discloses a problem
- 5 that extends under the storage container.
- 6 3. A department inspector shall attend the inspection.
- 7 (e) The operator repairs and maintains the liner and seams, as necessary, to ensure that
- 8 the liner complies with this subsection and remains effective. The operator shall perform repairs
 - according to manufacturer specifications. A qualified representative of the liner manufacturer
- shall perform or personally supervise each repair.
- 11 (f) The liner rests on one of the following bases, installed according to good engineering
- practice to provide stable support for the liner:
- 1. A synthetic geotextile.

- 2. A layer of soil, sand or smooth gravel at least a 6 inches (15.24 centimeters) thick.
- 15 The layer shall consist of particles less than ½ inch in diameter, and shall be free of sharp objects
- that may penetrate the liner.
- 17 (g) The liner is separated, by both of the following, from every storage container whose
- weight bears on the liner:
- 1. A synthetic geotextile that rests on the liner.
- 20 2. A layer of soil, sand or smooth gravel at least 3 inches (7.62 centimeters) thick that
- 21 rests on the synthetic geotextile. If the soil, sand or gravel is held in place by a steel, synthetic or
- other structure, the geotextile liner under subd. 1. shall extend beneath that structure.

(h) The liner is protected, as necessary, against damage from human and motor vehicle
 traffic.

- (i) The liner is protected against damage from sunlight and other sources, as necessary, according to manufacturer recommendations.
- (4) PREFABRICATED STRUCTURES. A secondary containment structure may consist of one or more basins pre-fabricated of steel or rigid synthetic material if all of the following apply:
- (a) The steel or synthetic material resists corrosion, puncture and cracking. Prefabricated steel structures shall be at least 1/8 inch thick at every point.
- (b) The steel or synthetic material is chemically compatible with all fertilizers or pesticides that may be stored within the basin. The basin manufacturer shall certify chemical compatibility in writing, and the operator shall submit a copy of the certification to the department.
- (c) If 2 or more basins are connected to form the secondary containment structure, the connection permits free movement of any discharged liquid between the basins.
- (5) STEEL STRUCTURES CONSTRUCTED IN PLACE. A secondary containment structure may be constructed of steel, if it is constructed in place. A steel secondary containment structure constructed on or after [revisor inserts effective date of this rule] shall be at least 1/8 inch thick at every point.
- (6) STRUCTURES WITH EARTHEN LINERS. (a) A secondary containment structure may be constructed of earth or other materials if one of the following applies and the structure has an earthen liner that complies with par. (b):
 - 1. The structure was in use prior to [revisor inserts effective date of this rule].
 - 2. The structure contains only fertilizer storage containers that were constructed on site.

- (b) An earthen liner under par. (a) shall comply with all of the following:
- 2 1. The liner shall be designed and constructed, according to good engineering practice, to
- 3 achieve a coefficient of permeability of not more than 1×10^{-6} cm/sec.
- 4 2. The liner shall be at least 6 inches (15 centimeters) thick.

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- 5 3. The liner shall be covered by an inorganic soil layer not less than 6 inches (15 centimeters) thick.
- 7 4. The liner shall be maintained to prevent cracking.
- 8 5. The liner may not be constructed of silt, silty sand or other frost–susceptible soils.
 - 6. If the liner is made of natural soil, not less than 50% by weight of the natural soil shall pass through a number 200 soil sieve and not less than 95% by weight of the natural soil shall pass through a number 4 sieve. A natural soil liner shall contain not more than 2% organic material and shall have a plasticity index of at least 15.
 - 7. The liner, if treated with bentonite, shall have a uniform mixture of natural soil and bentonite. The natural soil shall have a plasticity index of at least 12. Not less than 30% by weight of the natural soil shall pass through a number 200 soil sieve, and not less than 95% by weight of the natural soil shall pass through a number 4 soil sieve. Not less than 90% by weight of the bentonite shall pass through a number 80 soil sieve, and the soil—bentonite mixture shall contain at least 5% bentonite by weight.
 - 8. The liner shall be reconstructed at least once every 15 years.
 - 9. The operator shall remove storage containers from the secondary containment structure before reconstructing or recompacting the liner, except that the operator is not required to remove a storage container that has a capacity of 50,000 gallons or more.

- 10. Before the operator reconstructs or recompacts the liner, the operator shall analyze 1 the liner material for compliance with subds. 6. and 7., and to determine whether corrective 2 action is required under ch. ATCP 35.
 - (7) BUILDING FLOOR; MINI-BULK AND MOBILE CONTAINERS. A warehouse or other building may be used as a secondary containment structure for all of the following if the building complies with this section and can contain a discharge of liquid fertilizer or pesticide:
 - (a) Mini-bulk containers of fertilizer or pesticide.

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- (b) Mobile containers kept in the building for not more than 7 days. 8
 - (8) MIXING AND LOADING PADS USED FOR SECONDARY CONTAINMENT. An operator may use a mixing and loading pad as a secondary containment structure if the mixing and loading pad complies with s. ATCP 33.32 and this section.
 - (9) TANK-IN-TANK. An operator may use a tank-in-tank, without any other secondary containment structure, if all of the following apply:
 - (a) A liquid level monitoring device automatically stops the flow of fertilizer or pesticide into the inner tank when the inner tank is filled to the maximum level allowed under s. ATCP 33.20(9).
- (b) The tank-in-tank is equipped to ensure safe and effective detection and recovery of 17 liquid leaked from the inner tank to the outer tank. 18
 - (c) The operator inspects the tank-in-tank and leak detection system at least monthly.
 - (d) The operator does all of the following in response to a leak:
- 1. Promptly reports the leak to the department. 21
- 2. Empties the tank-in-tank no later than a date specified by the department in writing. 22

- 3. Thoroughly cleans the tank-in-tank, and has it repaired by a person certified to
 perform repairs under API 653, before restoring the tank-in-tank to service.
 - (10) BLADDER TANK. An operator may use a bladder tank, without any other secondary containment structure, if all of the following apply:
- 5 (a) The outer steel part of the bladder tank complies with s. ATCP 33.20.
- 6 (b) The bladder within the tank is at least 40 mils thick.

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- (c) The manufacturer certifies that the bladder is chemically compatible with all materials that may be stored in it, and will withstand normal operational stresses without failing.
- (d) A qualified installer installs the bladder tank and its appurtenances.
- (e) All appurtenances that extend through both the bladder and the tank have shut-off valves. The shut-off valves shall be enclosed within a structural steel box that can withstand the maximum hydrostatic head pressure of liquid within the bladder tank. The box shall be readily accessible to the operator, but secured against unauthorized access.
- (f) A liquid level monitoring device automatically stops the flow of fertilizer or pesticide into the bladder when the bladder is filled to the maximum level allowed under s. ATCP 33.20(9).
- 17 (g) There is room for a person to enter the space between the bladder and tank when the 18 bladder is empty.
 - (h) The tank has a soft liner to protect the bladder from contact with the steel interior surface of the tank.
 - (i) The tank is equipped to ensure safe and effective detection and recovery of liquid leaked from the bladder to the tank.
 - (j) The operator inspects the tank and leak detection system at least monthly.

1	(k) The operator does all of the following in response to a leak.
2	1. Promptly reports the leak to the department.
3	2. Empties the bladder and tank no later than a date specified by the department in
4	writing.
5	3. Has the bladder repaired by a qualified person before restoring the bladder tank to
6	service.
7	4. Cleans affected portions of the bladder, soft liner and interior tank surface before
8	restoring the bladder tank to service.
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10	SUBCHAPTER VII DISCHARGES AND PRECIPITATION
12 13	ATCP 33.50 Available pump and storage container. An operator shall have, readily
14	available at a storage facility, one or more functional pumps that the operator can use to remove
15	liquid from every mixing and loading pad, sump or secondary containment structure at the
16	storage facility. Each pump shall be plumbed or have a readily available hose connection to a
17	storage container that complies with s. ATCP 33.20, so that recovered liquid can be pumped to
18	the storage container. The pump shall self-activate, or shall be susceptible to immediate
19	activation by the operator, whenever needed. The storage container shall have, at all times, an
20	unused capacity of at least 200 gallons.
21	ATCP 33.52 Discharges and precipitation. (1) DISCHARGE RESPONSE; GENERAL.
22	The operator of a storage facility shall do all of the following whenever there is a discharge:
23	(a) Take immediate and appropriate action to mitigate any risks that the discharge may
24	pose to public health and the environment.

NOTE: A release of rinsate is considered a discharge. See ATCP 33.01(10) and (28).

- (b) Report the discharge to the Wisconsin department of natural resources if a report is 1 required under ch. NR 706. 2 **NOTE:** If a discharge is fully contained in a mixing and loading pad, sump or secondary 3 containment structure, a discharge report is not required under ch. NR 706 unless 4 the discharge poses an immediate threat to human health. 5 (2) CONTAINED DISCHARGE OR PRECIPITATION. Except as provided in sub. (3), an 6 operator shall recover any unfrozen discharge or unfrozen precipitation that collects in a mixing 7 and loading pad, sump or secondary containment structure. The operator shall recover the 8 unfrozen discharge or precipitation by the end of the first business day in which the collected 9 discharge or precipitation is present in the mixing and loading pad, sump or secondary 10 containment structure. The operator shall take earlier action to recover the collected discharge or 11 precipitation if earlier action is necessary to do any of the following: 12 (a) Maintain the effective discharge containment capacity of a mixing and loading pad, 13 sump or secondary containment structure. 14 (b) Prevent instability of storage containers. 15 (c) Minimize the risk of a discharge to the environment. 16 (d) Prevent vehicles from driving through discharges, rinsate or collected precipitation
- on the mixing and loading pad. 18

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- (3) Precipitation contained in Fertilizer Secondary Containment Structure. Subsection (2) does not apply to precipitation that has collected in a fertilizer secondary containment structure, provided that the operator uses at least one of the following methods to manage that collected precipitation:
- (a) The operator may recover all of the collected precipitation, and transfer it to a storage container in the secondary containment structure by the end of the first business day in which the collected precipitation is present in the secondary containment structure.

- 1 (b) The operator may store the collected precipitation in the fertilizer secondary
 2 containment structure until the precipitation can be properly used according to s. ATCP 33.56 or
 3 until it evaporates, provided that the operator complies with sub. (4).
 - (c) The operator may apply the collected precipitation to a vegetative filter strip at or adjacent to the storage facility, provided that all of the following apply:
 - 1. The operator applies the collected precipitation according to a written plan approved by the department. The plan shall consider the volume of liquid to be applied, the nutrient content of the liquid, the nutrient utilization capacity of the filter strip, and seasonal conditions that may affect that utilization capacity.
 - 2. The operator maintains living vegetation on the entire filter strip.
- 11 3. The operator complies with sub. (4).

- (d) The operator may discharge the collected precipitation to areas of the storage facility from which there is no potential for direct runoff to waters of the state, provided that all of the following apply:
- 1. The operator complies with sub. (4).
- 2. None of the samples analyzed under sub. (4)(b) contains more that 20 milligrams of total nitrogen per liter.
- (e) An operator may discharge the collected precipitation to a public wastewater treatment system, provided the operator has written permission from the authority that operates the system.
 - (f) An operator may discharge the collected precipitation to surface water, via a storm sewer or other conduit, if the operator has written permission from the Wisconsin department of natural resources.

1	(4) SAMPLE TESTING AND FOLLOW-UP. An operator who uses any of the management
2	methods under sub. (3)(b) to (d) shall do all of the following:
3	(a) Obtain at least one sample of collected precipitation in each of the months of April,
4	June, August or October.
5	(b) Have the samples under subd. 1. analyzed, at a laboratory certified by the Wisconsi

- (b) Have the samples under subd. 1. analyzed, at a laboratory certified by the Wisconsin department of natural resources under ch. NR 149, for nitrate/nitrite-nitrogen and ammonia/ammonium-nitrogen.
- (c) If any sample analyzed under par. (b) contains more than 200 milligrams of total nitrogen under par. (b) per liter, notify the department and implement a department-approved plan to manage collected precipitation containing more than 200 milligrams of total nitrogen per liter.
 - (d) Keep accurate records of all analytical results under par. (b).

- 13 ATCP 33.54 Managing recovered discharges, rinsate and collected precipitation.
- 14 (1) Liquid recovered under s. ATCP 33.52, if held by the operator pending use or disposal, shall be held in a storage container that complies with s. ATCP 33.20 and is located in a secondary containment structure that complies with s. ATCP 33.42.
 - (2) Dry fertilizer or pesticide recovered under ATCP 33.52, if held by the operator pending use or disposal, shall be handled in a manner that complies with s. ATCP 33.22.
 - ATCP 33.56 Use and disposal of recovered material. (1) SAFE USE OR DISPOSAL. An operator shall safely use or dispose of material recovered under s. ATCP 33.52. Use and disposal shall comply with applicable federal, state and local regulations.
 - (2) PESTICIDES. An operator may not sell, distribute or apply any material recovered under s. ATCP 33.52 as a pesticide unless that sale or distribution complies with ch. ATCP 29.

1 2 3 4 5	material recovered from the environment as part of an environmental remediation under ch. ATCP 35. (3) FERTILIZERS. (a) Except as provided in par. (b), an operator may not sell or
6	distribute any material recovered under s. ATCP 33.52 as a fertilizer or soil or plant additive
7	unless that sale or distribution complies with ch. ATCP 40.
8	(b) Notwithstanding ch. ATCP 40, an operator may apply to land free of charge, or
9	distribute free of charge to a landowner for application to that person's land, rinsate recovered
10	under s. ATCP 33.52 if the operator discloses to the landowner the types of fertilizer or soil or
11	plant additives contained in that rinsate.
12 13 14 15	NOTE: If rinsate contains pesticide, an operator must also comply with sub. (2). An operator must obtain a permit under s. ATCP 35.03 before landspreading material recovered from the environment as part of an environmental remediation under ch. ATCP 35.
16 17	ATCP 33.58 Discharge response preparedness. (1) DISCHARGE RESPONSE PLAN
18	REQUIRED. (a) The operator of a storage facility shall have a written discharge response plan for
19	all of the following:
20	1. Discharges at the storage facility.
21	2. Discharges, at locations outside the storage facility, from mobile containers shipped
22	from the storage facility.
23	(b) An operator shall do all of the following, with respect to a discharge response plan
24	under par. (a):
25	1. Review and amend the plan, as necessary, at least once each year.
26	2. Keep a copy of the plan readily available at the storage facility and at the nearest local
27	office from which the operator administers the storage facility.
28	3. Make the plan available to the department for inspection and copying upon request.

1	4. Notify the local fire department, police department and emergency planning
2	committee of the plan and any plan revisions, and provide them with copies upon request.
3 4 5	NOTE: Federal law under 42 USC 11002 and 11003 requires response plans for certain chemicals. A single response plan may satisfy requirements under sub. (1) and federal law.
6	(2) PLAN CONTENTS. A discharge response plan under sub. (1) shall include all of the
7	following:
8	(a) The identity, address and telephone number of the individual who is responsible for
9	managing the storage facility.
10	(b) The spill reporting telephone number (1-800-943-0003) maintained by the
11	department of natural resources and department of military affairs emergency management
12	division.
13	(c) The telephone number of the department's agricultural resource management division
14	(608-224-4500), or the identity and telephone number of the division's local environmental
15	enforcement specialist.
16	(d) The names and telephone numbers of 2 local excavation contractors and 2 local earth
17	hauling contractors.
18	(e) A map or diagram of the storage facility. The map or diagram shall include all of the
19	following:
20	1. The location of each fertilizer storage container or bin, and the name or grade of
21	fertilizer stored in that container or bin.
22	2. The location of each pesticide storage container or bin, other than a mini-bulk
23	container, and the name of the pesticide product stored in that container or bin.
24	3. The location of each mini-bulk container storage area.
25	(f) Procedures for responding to discharges at the storage facility.

1	(g) Procedures for responding to discharges from mobile storage containers shipped from
2	the storage facility.
3	(h) Procedures for using or disposing of a recovered discharges.
4	(3) EQUIPMENT, SUPPLIES AND TRAINED PERSONNEL. (a) Pumps, recovery containers,
5	personal protective equipment, and other necessary equipment and supplies shall be readily
6	available for any discharge response that may reasonably be needed.
7	(b) Persons employed at a storage facility shall be trained in discharge response
8	procedures. Trained personnel shall be readily available to implement a discharge response.
9	(c) An operator may arrange with a local fire department or other persons to provide
10	equipment, supplies and personnel required under pars. (a) and (b) if the operator makes those
11	arrangements in advance as part of the operator's discharge response plan.
12	(d) An operator shall have available, at the storage facility, absorbent materials that may
13	be used to control and clean up small liquid discharges.
14	(e) An operator shall decontaminate equipment and supplies, as necessary, after using
15	them to control and recover a discharge.
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17 18 19	SUBCHAPTER VIII TRANSPORTATION AND HANDLING PRACTICES
20	ATCP 33.60 Transporting bulk fertilizer and bulk pesticide. (1) GENERAL. An
21	operator shall transport bulk fertilizer and bulk pesticide in a manner that prevents reasonably
22	foreseeable and preventable hazards to persons, property and the environment.

1	(2) TRANSPORT VEHICLES. Containers and appurtenances used to transport bulk fertilizer
2	or bulk pesticide shall be securely anchored to transport vehicles so that stresses from normal
3	vehicle operation will not cause a discharge and will not cause the containers and appurtenances
4	to move independently of the vehicle. Equipment, tools and other items carried on transport
5	vehicles shall be secured against damaging contact with containers or appurtenances.
6	(3) PROTECTION AGAINST DAMAGE OR ACCESS. Containers and appurtenances used to
7	transport bulk fertilizer or bulk pesticide shall be protected from damage or destruction, and shall
8	be secured against access by the general public and animals.
9	(4) DEFECTIVE CONTAINERS. An operator may not transport bulk fertilizer or bulk
10	pesticide in a visibly broken, defective or improperly sealed container unless that container is
11	enclosed in another container that effectively prevents the discharge of fertilizer or pesticide.
12	ATCP 33.62 Dust control in dry product loading. An operator shall use a loading
13	chute or other dust control device to unload dry bulk fertilizer or dry bulk pesticide from storage
14	containers to transport vehicles or application equipment, so that the air gap between the load-out
15	equipment and the top rim of the transport vehicle or application equipment being filled does not

16 exceed 2 feet.

SUBCHAPTER IX ENVIRONMENTAL ASSESSMENTS

ATCP 33.70 Environmental assessments. (1) ASSESSMENT REQUIRED. An operator shall conduct an assessment under sub. (2) whenever any of the following structures used for liquid bulk fertilizer or liquid bulk pesticide leaks, is removed, or remains out of use for more than 5 years:

(a) A mixing and loading pad.

1	(b) A sump.			
2	(c) A secondary containment structure.			
3	(2) NATURE AND SCOPE OF ASSESSMENT. (a) An assessment under sub. (1) shall assess			
4	all of the following:			
5	1. Whether there have been any discharges to the environment.			
6	2. The extent and severity of any environmental contamination caused by the discharges			
7	under subd. 1.			
8	(b) The assessment under sub. (1) shall include sampling and analysis of soils,			
9	groundwater and other media, as necessary.			
10	(3) RECORD AND REPORT. An operator shall file with the department a written report of			
11	each assessment under this section. The record and report shall indicate the nature, scope and			
12	findings of the assessment.			
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14 15 16	SUBCHAPTER X RECORDS AND REPORTS			
17	ATCP 33.80 Records. (1) RECORDS REQUIRED. An operator shall make and keep all of			
18	the following records:			
19	(a) Records of API 653 inspections required under s. ATCP 33.20(1)(f)2.			
20	(b) Records of inspection and maintenance required under ss. ATCP 33.20(13), 33.32(7)			
21	33.36(6) and 33.42(5).			
22	(c) Records of pressure tests required under ss. ATCP 33.20(2)(d)1. and 33.38(2)(d).			
23	(d) Precipitation sample test records required under s. ATCP 33.52(4).			

1	(2) RECORD RETENTION. An operator shall retain the records under sub. (1)(a) for as long		
2	as the operator owns, operates or controls the storage facility. An operator shall retain the		
3	records under sub. (1)(b) to (d) for at least 3 years.		
4	(3) RECORD LOCATION; INSPECTION AND COPYING. An operator shall retain the records		
5	under sub. (1) at the storage facility, or at the nearest local office from which the operator		
6	administers that storage facility. The operator shall make the records available to the department		
7	for inspection and copying upon request.		
8	ATCP 33.82 Real estate sale or lease; disclosure. An operator shall do all of the		
9	following before the operator sells or leases, for another use, real estate that has been used for a		
10	storage facility:		
11	(1) Notify the department of the sale or lease.		
12	(2) Disclose to the purchaser or lessee that the real estate has been used as a storage		
13	facility.		
14 15 16	NOTE: Section ATCP 33.82 does not relieve the operator of other disclosure requirements that may apply under other law.		
17	EFFECTIVE DATE AND INITIAL APPLICABILITY. (1) Except as provided in sub. (2), this		
18	rule takes effect on the first day of the month following publication in the Wisconsin		
19	administrative register, as provided in s. 227.22(2), Stats.		
20	(2) This rule first applies to small businesses as defined in s. 227.114(1), Stats., on the		
21	first day of the third month commencing after the date of publication in the Wisconsin		
22	administrative register, as provided in s. 227.22(2)(e), Stats.		
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25			

Dated this	day of	, 2006.
	STATE OF V	WISCONSIN
	DEPARTME	ENT OF AGRICULTURE,
		D CONSUMER PROTECTION
	Ву	
	Rodney J. 1	Nilsestuen, Secretary